# Senate



General Assembly

File No. 266

February Session, 2018

Senate Bill No. 7

Senate, April 5, 2018

The Committee on Environment reported through SEN. KENNEDY of the 12th Dist. and SEN. MINER of the 30th Dist., Chairpersons of the Committee on the part of the Senate, that the bill ought to pass.

# AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

- 1 Section 1. Subsection (d) of section 8-23 of the 2018 supplement to
- 2 the general statutes is repealed and the following is substituted in lieu
- 3 thereof (*Effective from passage*):

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- (d) In preparing such plan, the commission or any special committee shall consider the following: (1) The community development action plan of the municipality, if any, (2) the need for affordable housing, (3) the need for protection of existing and potential public surface and ground drinking water supplies, (4) the use of cluster development and other development patterns to the extent consistent with soil types, terrain and infrastructure capacity within the municipality, (5) the state plan of conservation and development adopted pursuant to chapter 297, (6) the regional plan of conservation
- 13 and development adopted pursuant to section 8-35a, (7) physical,

14 social, economic and governmental conditions and trends, (8) the 15 needs of the municipality including, but not limited to, human 16 resources, education, health, housing, recreation, social services, public 17 utilities, public protection, transportation and circulation and cultural 18 and interpersonal communications, (9) the objectives of energy-19 efficient patterns of development, the use of solar and other renewable 20 forms of energy and energy conservation, (10) protection and 21 preservation of agriculture, (11) [sea level change scenarios published 22 by the National Oceanic and Atmospheric Administration in Technical 23 Report OAR CPO-1] the most recent sea level change scenario updated 24 pursuant to subsection (b) of section 25-680, as amended by this act, and (12) the need for technology infrastructure in the municipality. 25

- Sec. 2. Subsection (a) of section 16a-3a of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- 29 (a) The Commissioner of Energy and Environmental Protection, in 30 consultation with the electric distribution companies, shall review the 31 state's energy and capacity resource assessment and approve the 32 Integrated Resources Plan for the procurement of energy resources, 33 including, but not limited to, conventional and renewable generating 34 facilities, energy efficiency, load management, demand response, 35 combined heat and power facilities, distributed generation and other 36 emerging energy technologies to meet the projected requirements of 37 customers in a manner that minimizes the cost of all energy resources 38 to customers over time and maximizes consumer benefits consistent 39 with the state's environmental goals and standards, including, but not 40 limited to, the state's greenhouse gas reduction goals established in 41 section 22a-200a, as amended by this act. The Integrated Resources 42 Plan shall seek to lower the cost of electricity while meeting such 43 environmental goals and standards in the most cost-effective manner.
- Sec. 3. Section 16a-3d of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- (a) On or before October 1, [2016] 2020, and every [three] four years

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thereafter, the Commissioner of Energy and Environmental Protection shall prepare a Comprehensive Climate and Energy Strategy. Said strategy shall reflect the legislative findings and policy stated in shall provide any analysis and section 16a-35k, and recommendations necessary to guide the state's energy policy to meet greenhouse gas emission reduction requirements, as established in section 22a-200a, as amended by this act, in the most cost-effective manner and incorporate (1) an assessment and plan for all energy needs in the state, including, but not limited to, electricity, heating, cooling, and transportation, (2) the findings of the Integrated Resources Plan, (3) the findings of the plan for energy efficiency adopted pursuant to section 16-245m, (4) the findings of the plan for renewable energy adopted pursuant to section 16-245n, [and] (5) the Energy Assurance Plan developed for the state of Connecticut pursuant to the American Recovery and Reinvestment Act of 2009, P.L. 111-5, or any successor Energy Assurance Plan developed within a reasonable time prior to the preparation of any Comprehensive Climate and Energy Strategy, and (6) the findings of any report prepared pursuant to section 22a-200a, as amended by this act. Said strategy shall further include, but not be limited to, (A) an assessment of current energy supplies, demand and costs, (B) identification and evaluation of the factors likely to affect future energy supplies, demand and costs, (C) a statement of progress made toward achieving the goals and milestones set in the preceding Comprehensive Climate and Energy Strategy, (D) a statement of energy policies and long-range energy planning objectives and strategies appropriate to achieve, [among other things] the state's greenhouse gas reduction goals established in section 22a-200a, as amended by this act, a sound economy, the least-cost mix of energy supply sources to meet said goals and measures that reduce demand for energy, giving due regard to such factors as consumer price impacts, security and diversity of fuel supplies and energy generating methods, protection of public health and safety, environmental goals and standards, conservation of energy and energy resources and the ability of the state to compete economically, (E) recommendations for administrative and legislative

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actions to implement such policies, objectives and strategies, (F) an assessment of the potential costs savings and benefits to ratepayers, including, but not limited to, carbon dioxide emissions reductions or voluntary joint ventures to repower some or all of the state's coal-fired and oil-fired generation facilities built before 1990, [and] (G) the benefits, costs, obstacles and solutions related to the expansion and use and availability of natural gas in Connecticut, and (H) a strategy for ensuring the state's energy efficiency goals are met. [If the department finds that such expansion is in the public interest, it shall develop a plan to increase the use and availability of natural gas.]

(b) In adopting the Comprehensive Climate and Energy Strategy, the Commissioner of Energy and Environmental Protection shall conduct a proceeding that shall not be considered a contested case under chapter 54, but shall include not less than one public meeting and one technical meeting at which technical personnel shall be available to answer questions. Such meetings shall be transcribed and posted on the department's Internet web site. Said commissioner shall give not less than fifteen days' notice of such proceeding by electronic publication on the department's Internet web site. Not later than fifteen days prior to any such public meeting and not less than thirty days prior to any such technical meeting, the commissioner shall publish notice of either such meeting and post the text of the proposed Comprehensive Climate and Energy Strategy on the department's Internet web site. Notice of such public meeting or technical meeting may also be published in one or more newspapers having state-wide circulation if deemed necessary by the commissioner. Such notice shall state the date, time, and place of the meeting, the subject matter of the meeting, the manner and time period during which comments may be submitted to said commissioner, the statutory authority for the proposed strategy and the location where a copy of the proposed strategy may be obtained or examined in addition to posting the proposed strategy on the department's Internet web site. Said commissioner shall provide a time period of not less than sixty days from the date the notice is published on the department's Internet web site for public review and comment. During such time period, any

person may provide comments concerning the proposed strategy to said commissioner. Said commissioner shall consider fully all written and oral comments concerning the proposed strategy after all public meetings and technical meetings and before approving the final strategy. Said commissioner shall (1) notify by electronic mail each person who requests such notice, and (2) post on the department's Internet web site the electronic text of the final strategy and a report summarizing all public comments and the changes made to the final strategy in response to such comments and the reasons therefor. The Public Utilities Regulatory Authority shall comment on the strategy's impact on natural gas and electric rates.

- (c) The Commissioner of Energy and Environmental Protection shall submit the final Comprehensive <u>Climate and</u> Energy Strategy electronically to the joint standing committees of the General Assembly having cognizance of matters relating to energy and the environment.
- (d) The Commissioner of Energy and Environmental Protection may
   modify the Comprehensive <u>Climate and</u> Energy Strategy in accordance
   with the procedures outlined in subsections (b) and (c) of this section.

Sec. 4. Section 16a-3e of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

The Integrated Resources Plan, as described in section 16a-3a, <u>as</u> <u>amended by this act</u>, shall (1) indicate specific options to reduce electric rates and costs <u>while achieving the state's greenhouse gas</u> <u>emission reduction requirements established in section 22a-200a</u>, <u>as amended by this act</u>. Such options may include the procurement of new sources of generation. In the review of new sources of generation, the Integrated Resources Plan shall indicate whether the private wholesale market can supply such additional sources or whether state financial assistance, long-term purchasing of electricity contracts or other interventions are needed to achieve the goal; (2) analyze in-state renewable sources of electricity in comparison to transmission line upgrades or new projects and out-of-state renewable energy sources, provided such analysis also considers the benefits of additional jobs

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and other economic impacts and how they are created and subsidized; (3) include an examination of average consumption and other states' best practices to determine why electricity rates are lower elsewhere in the region; (4) assess and compare the cost of transmission line projects, new power sources, renewable sources of electricity, conservation and distributed generation projects to ensure the state pursues only the least-cost alternative projects; (5) analyze the potential for electric vehicles, as defined in section 16-19eee, to provide energy storage and other services to the electric grid and identify strategies to ensure that the grid is prepared to support increased electric vehicle charging, based on projections of sales of electric vehicles; (6) continually monitor supply and distribution systems to identify potential need for transmission line projects early enough to identify alternatives; and (7) assess the least-cost alternative to address reliability concerns, including, but not limited to, lowering electricity demand through conservation and distributed generation projects before an electric distribution company submits a proposal for transmission lines or transmission line upgrades to the independent system operator or the Federal Energy Regulatory Commission, provided no provision of such plan shall be deemed to prohibit an electric distribution company from making any filing required by law or regulation.

- Sec. 5. Subsection (h) of section 16a-27 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (h) Any revision made after October 1, [2013] <u>2019</u>, shall (1) take into consideration risks associated with increased coastal <u>flooding and</u> erosion, depending on site topography, as anticipated in [sea level change scenarios published by the National Oceanic and Atmospheric Administration in Technical Report OAR CPO-1] <u>the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act, (2) identify the impacts of such increased <u>flooding and</u> erosion on infrastructure and natural resources, [and] (3) make recommendations for the siting of future infrastructure and</u>

184 property development to minimize the use of areas prone to such

- 185 <u>flooding and</u> erosion, and (4) take into consideration the state's
- 186 greenhouse gas reduction goals established pursuant to section 22a-
- 187 200a, as amended by this act.
- Sec. 6. Subsection (a) of section 22a-92 of the general statutes is
- repealed and the following is substituted in lieu thereof (*Effective from*
- 190 passage):
- 191 (a) The following general goals and policies are established by this
- 192 chapter:
- 193 (1) To ensure that the development, preservation or use of the land
- 194 and water resources of the coastal area proceeds in a manner
- 195 consistent with the rights of private property owners and the
- 196 capability of the land and water resources to support development,
- 197 preservation or use without significantly disrupting either the natural
- 198 environment or sound economic growth;
- 199 (2) To preserve and enhance coastal resources in accordance with
- 200 the policies established by chapters 439, 440, 446i, 446k, 447, 474 and
- 201 477;
- 202 (3) To give high priority and preference to uses and facilities which
- 203 are dependent upon proximity to the water or the shorelands
- 204 immediately adjacent to marine and tidal waters;
- 205 (4) To resolve conflicts between competing uses on the shorelands
- adjacent to marine and tidal waters by giving preference to uses that
- 207 minimize adverse impacts on natural coastal resources while
- 208 providing long term and stable economic benefits;
- 209 (5) To consider [in the planning process] the potential impact of a
- 210 rise in sea level, coastal flooding and erosion patterns on coastal
- 211 development so as to minimize damage to and destruction of life and
- 212 property and minimize the necessity of public expenditure and
- 213 shoreline armoring to protect future new development from such
- 214 hazards;

(6) To encourage public access to the waters of Long Island Sound by expansion, development and effective utilization of state-owned recreational facilities within the coastal area that are consistent with sound resource conservation procedures and constitutionally protected rights of private property owners;

- 220 (7) To conduct, sponsor and assist research in coastal matters to 221 improve the data base upon which coastal land and water use 222 decisions are made;
  - (8) To coordinate the activities of public agencies to ensure that state expenditures enhance development while affording maximum protection to natural coastal resources and processes in a manner consistent with the state plan for conservation and development adopted pursuant to part I of chapter 297;
  - (9) To coordinate planning and regulatory activities of public agencies at all levels of government to ensure maximum protection of coastal resources while minimizing conflicts and disruption of economic development; and
  - (10) To ensure that the state and the coastal municipalities provide adequate planning for facilities and resources which are in the national interest as defined in section 22a-93, as amended by this act, and to ensure that any restrictions or exclusions of such facilities or uses are reasonable. Reasonable grounds for the restriction or exclusion of a facility or use in the national interest shall include a finding that such a facility or use: (A) May reasonably be sited outside the coastal boundary; (B) fails to meet any applicable federal and state environmental, health or safety standard; or (C) unreasonably restricts physical or visual access to coastal waters. This policy does not exempt any nonfederal facility in use from any applicable state or local regulatory or permit program nor does it exempt any federal facility or use from the federal consistency requirements of Section 307 of the federal Coastal Zone Management Act.
    - Sec. 7. Subdivision (7) of section 22a-93 of the general statutes is

repealed and the following is substituted in lieu thereof (*Effective from passage*):

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(7) "Coastal resources" means the coastal waters of the state, their natural resources, related marine and wildlife habitat and adjacent shorelands, both developed and undeveloped, that together form an integrated terrestrial and estuarine ecosystem; coastal resources include the following: (A) "Coastal bluffs and escarpments" means naturally eroding shorelands marked by dynamic escarpments or sea cliffs which have slope angles that constitute an intricate adjustment between erosion, substrate, drainage and degree of plant cover; (B) "rocky shorefronts" means shorefront composed of bedrock, boulders and cobbles that are highly erosion-resistant and are an insignificant source of sediments for other coastal landforms; (C) "beaches and dunes" means beach systems including barrier beach spits and tombolos, barrier beaches, pocket beaches, land contact beaches and related dunes and sandflats; (D) "intertidal flats" means very gently sloping or flat areas located between high and low tides composed of muddy, silty and fine sandy sediments and generally devoid of vegetation; (E) "tidal wetlands" means "wetland" as defined by section 22a-29; (F) "freshwater wetlands and watercourses" means "wetlands" and "watercourses" as defined by section 22a-38; (G) "estuarine embayments" means a protected coastal body of water with an open connection to the sea in which saline sea water is measurably diluted by fresh water including tidal rivers, bays, lagoons and coves; (H) "coastal hazard areas" means those land areas inundated during coastal storm events or subject to erosion induced by such events, including flood hazard areas as defined and determined by the National Flood Insurance Act, as amended (USC 42 Section 4101, P.L. 93-234), all areas subject to inundation as determined by the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act, and all erosion hazard areas as determined by the commissioner; (I) "developed shorefront" means those harbor areas which have been highly engineered and developed resulting in the functional impairment or substantial alteration of their natural physiographic features or systems; (J) "island" means land

282 surrounded on all sides by water; (K) "nearshore waters" means the 283 area comprised of those waters and their substrates lying between 284 mean high water and a depth approximated by the ten meter contour; 285 (L) "offshore waters" means the area comprised of those waters and 286 their substrates lying seaward of a depth approximated by the ten 287 meter contour; (M) "shorelands" means those land areas within the 288 coastal boundary exclusive of coastal hazard areas, which are not 289 subject to dynamic coastal processes and which are comprised of 290 typical upland features such as bedrock hills, till hills and drumlins; 291 (N) "shellfish concentration areas" means actual, potential or historic 292 areas in coastal waters, in which one or more species of shellfish 293 aggregate;

- Sec. 8. Subdivision (19) of section 22a-93 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- 297 (19) "Rise in sea level" means the [arithmetic mean of the most recent equivalent per decade rise in the surface level of the tidal and coastal waters of the state, as documented in National Oceanic and Atmospheric Administration online or printed publications for said agency's Bridgeport and New London tide gauges] most recent sea level change scenario updated pursuant to subsection (b) of section 25- 680, as amended by this act.
- Sec. 9. Section 22a-94 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- 306 (a) The Connecticut coastal area shall include the land and water 307 within the area delineated by the following: The westerly, southerly 308 and easterly limits of the state's jurisdiction in Long Island Sound; the 309 towns of Greenwich, Stamford, Darien, Norwalk, Westport, Fairfield, 310 Bridgeport, Stratford, Shelton, Milford, Orange, West Haven, New 311 Haven, Hamden, North Haven, East Haven, Branford, Guilford, 312 Madison, Clinton, Westbrook, Deep River, Chester, Essex, Old 313 Saybrook, Lyme, Old Lyme, East Lyme, Waterford, New London, 314 Montville, Norwich, Preston, Ledyard, Groton and Stonington.

(b) Within the coastal area, there shall be a coastal boundary which shall be a continuous line delineated on the landward side by the interior contour elevation of the one hundred year frequency coastal flood zone, as defined and determined by the National Flood Insurance Act, as amended (USC 42 Section 4101, P.L. 93-234), plus the elevation of the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act, or a one thousand foot linear setback measured from the mean high water mark in coastal waters that shall be determined from the elevation of the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act, or a one thousand foot linear setback measured from the inland boundary of tidal wetlands, [mapped under section 22a-20,] whichever is farthest inland; and shall be delineated on the seaward side by the seaward extent of the jurisdiction of the state.

- (c) The coastal boundary as defined in subsection (b) of this section shall be shown on maps or photographs prepared by the commissioner which supplement flood hazard rate maps prepared by the United States Department of Housing and Urban Development under the National Flood Insurance Act. Such maps shall be sufficiently precise to demonstrate whether the holdings of a property owner, or portions thereof, lie within the coastal boundary. Copies of such maps or photographs shall be filed with the commissioner and with the clerk of each coastal municipality.
- (d) The maps described in subsection (c) of this section shall be promulgated not later than July 1, 1980. Prior to final adoption of any map, the commissioner shall hold a public hearing in accordance with the provisions of chapter 54 within the applicable coastal town. The commissioner may use interim maps prepared on United States Geological Survey Topographic base at a scale of one to twenty-four thousand or their metric equivalent. In preparing such interim maps, the commissioner may use any man-made structure, natural feature, property line, preliminary flood hazard boundary maps as prepared by the United States Department of Housing and Urban Development,

or a combination thereof which most closely approximates the landward side of the boundary. Further, the commissioner may use city or town property tax maps or aerial photographs, state tidal wetlands photographs, or similar maps of property delineation as they are available.

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- (e) The commissioner may, from time to time, amend such maps described in subsection (c) of this section. Prior to the adoption of an amendment to any map, the commissioner shall hold a public hearing in the affected municipality in accordance with the provisions of chapter 54. The commissioner shall consider for amendment changes in the boundary petitioned by the coastal municipality, by any person owning real property within the boundary, or by twenty-five residents of such municipality. The commissioner shall approve, deny or modify such petition within sixty days of receipt and shall state, in writing, the reasons for his action. All amendments to the boundary shall be consistent with subsection (b) of this section.
- (f) A municipal coastal boundary may be adopted or amended by the municipal planning commission of each coastal municipality in accordance with the notice, hearing and other procedural requirements of section 8-24. Not later than one year after the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act, the municipal planning commission of each coastal municipality shall adopt or amend a municipal coastal boundary, in accordance with the notice, hearing and other procedural requirements of section 8-24, to reflect the landward extent of the interior contour elevation of the coastal boundary established in accordance with subsection (b) of this section. Such boundary may be delineated by roads, property lines or other identifiable natural or man-made features, provided such boundary shall approximate and in no event diminish the area within the coastal boundary as [defined] established in accordance with subsection (b) of this section and as mapped under subsection (d) of this section. Such boundary shall be sufficiently precise to demonstrate whether the holdings of a property owner, or portions thereof, lie within the boundary. Upon adoption,

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such boundary shall be submitted to the commissioner, [for mapping

- in accordance with subsection (c) of this section in electronic and
- paper form, as specified by the commissioner, for the commissioner's
- 386 <u>review and approval and shall be effective upon receipt of the</u>
- 387 <u>commissioner's written approval</u>. The municipal planning commission
- may, at its own discretion or upon request of a property owner, amend
- 389 the coastal boundary in accordance with the procedures and criteria of
- 390 this subsection.
- 391 (g) All property lying within the coastal boundary shall be subject to
- 392 the regulatory, development and planning requirements of this
- 393 chapter.
- Sec. 10. Subsection (a) of section 22a-200a of the general statutes is
- repealed and the following is substituted in lieu thereof (*Effective from*
- 396 passage):
- 397 (a) The state shall reduce the level of emissions of greenhouse gas:
- 398 (1) Not later than January 1, 2020, to a level at least ten per cent
- 399 below the level emitted in 1990; [and]
- 400 (2) Not later than January 1, 2030, to a level at least forty-five per
- 401 <u>cent below the level emitted in 2001; and</u>
- 402 [(2)] (3) Not later than January 1, 2050, to a level at least eighty per
- 403 cent below the level emitted in 2001.
- 404 [(3)] (4) All of the levels referenced in this subsection shall be
- 405 determined by the Commissioner of Energy and Environmental
- 406 Protection.
- Sec. 11. Subsection (a) of section 22a-478 of the general statutes is
- 408 repealed and the following is substituted in lieu thereof (Effective from
- 409 passage):
- 410 (a) The commissioner shall maintain a priority list of eligible water
- 411 quality projects and shall establish a system setting the priority for

412 making project grants, grant account loans and project loans. In 413 establishing such priority list and ranking system, the commissioner 414 shall consider all factors he deems relevant, including but not limited 415 to the following: (1) The public health and safety; (2) protection of 416 environmental resources; (3) population affected; (4) attainment of 417 state water quality goals and standards; (5) consistency with the state 418 plan of conservation and development; (6) state and federal 419 regulations; (7) the formation in municipalities of local housing 420 partnerships pursuant to the provisions of section 8-336f; and (8) the 421 necessity and feasibility of implementing measures designed to 422 mitigate the impact of a rise in sea level, as defined in section 22a-93, as 423 amended by this act, over the projected life span of such project. The 424 priority list of eligible water quality projects shall include a description 425 of each project and its purpose, impact, cost and construction schedule, 426 and an explanation of the manner in which priorities were established. 427 The commissioner shall adopt an interim priority list of eligible water 428 quality projects for the purpose of making project grants, grant account 429 loans and project loans prior to adoption of final regulations, which 430 priority list shall be the priority list currently in effect under subsection 431 (c) of section 22a-439.

- Sec. 12. Section 25-68b of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- As used in sections 25-68b to 25-68h, inclusive:

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- (1) "Activity" means any proposed state action in a floodplain or any proposed state action that impacts natural or man-made storm drainage facilities that are located on property that the commissioner determines to be controlled by the state;
  - (2) "Base flood" means that flood which has a one per cent chance of being equaled or exceeded in any year, as defined in regulations of the National Flood Insurance Program (44 CFR 59 et seq.), or that flood designated by the commissioner pursuant to section 25-68c. Any flood so designated by the commissioner shall have at least a one per cent chance of being equaled or exceeded in any year. Such flood may be

designated as the A or V zones on maps published by the National

- 446 Flood Insurance Program. The "base flood for a critical activity" means
- 447 the flood that has at least a .2 per cent chance of being equaled or
- exceeded in any year. Such flood may be designated as the B zone on
- 449 maps published for the National Flood Insurance Program;
- 450 (3) "Commissioner" means the Commissioner of Energy and 451 Environmental Protection;
- 452 (4) "Critical activity" means any activity, including, but not limited
- 453 to, the treatment, storage and disposal of hazardous waste and the
- siting of hospitals, housing for the elderly, schools or residences, in the
- 455 .2 per cent floodplain in which the commissioner determines that a
- 456 slight chance of flooding is too great;
- 457 (5) "Floodplain" means that area located within the real or
- 458 theoretical limits of the base flood or base flood for a critical activity;
- 459 (6) "Flood-proofing" means any combination of structural or
- 460 nonstructural additions, changes or adjustments which reduce or
- 461 eliminate flood damage to real estate or improved real property, to
- water and sanitary facilities, and to structures and their contents,
- 463 <u>including</u>, but not limited to, for properties within the coastal
- boundary, as established pursuant to subsection (b) of section 22a-94,
- as amended by this act, not less than an additional two feet of
- 466 <u>freeboard above base flood and any additional freeboard necessary to</u>
- 467 <u>account for the most recent sea level change scenario updated</u>
- 468 pursuant to subsection (b) of section 25-680, as amended by this act;
- (7) "Freeboard" means a safety factor, expressed in feet above a
- 470 calculated flood level, that compensates for unknown factors
- 471 contributing to flood heights greater than the calculated height,
- 472 including, but not limited to, ice jams, debris accumulations, wave
- actions, obstructions of bridge openings and floodways, the effects of
- 474 urbanization on the hydrology of a watershed, loss of flood storage
- due to development and sedimentation of a watercourse bed;

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(8) "Proposed state action" means individual activities or a sequence of planned activities proposed to be undertaken by a state department, institution or agency, any state or federal grant or loan proposed to be used to fund a project that affects land use, or proposed transfer of real property belonging to the state.

- Sec. 13. Subsection (h) of section 25-68d of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- (h) The provisions of subsections (a) to (d), inclusive, and (f) and (g) of this section shall not apply to the following critical activities above [the one-hundred-year flood elevation] base flood that involve state funded housing reconstruction, rehabilitation or renovation, provided the state agency that provides funding for such activity certifies that it complies with the provisions of the National Flood Insurance Program and the requirements of this subsection: (1) Projects involving the renovation or rehabilitation of existing housing on the Department of Housing's most recent affordable housing appeals list; (2) construction of minor structures to an existing building for the purpose of providing accessibility to persons with disabilities pursuant to the State Building Code; (3) construction of open decks attached to residential structures, properly anchored in accordance with the State Building Code; (4) the demolition and reconstruction of existing housing for persons and families of low and moderate income, provided there is no increase in the number of dwelling units and (A) such reconstruction is limited to the footprint of the existing foundation of the building or buildings used for such purpose, or which could be used for such purpose subsequent to reconstruction, or (B) such reconstruction is on a parcel of land where the elevation of such land is above the one-hundred-year flood elevation, provided there is no placement of fill within an adopted Federal Emergency Management Agency flood zone.
- Sec. 14. Section 25-680 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) On and after October 1, [2013] 2019, in the preparation of any municipal evacuation plan or hazard mitigation plan, such municipality shall consider [sea level change scenarios published by the National Oceanic and Atmospheric Administration in Technical Report OAR CPO-1] the most recent sea level change scenario updated pursuant to subsection (b) of this section.

- 515 (b) Within available resources and not less than once every ten 516 years, the Marine Sciences Division of The University of Connecticut 517 shall update the sea level change scenarios published by the National 518 Oceanic and Atmospheric Administration in Technical Report OAR 519 CPO-1. Within available resources and not less than ninety days prior 520 to any update of such sea level change scenarios by said Marine 521 Sciences Division, the division shall conduct not less than one public 522 hearing concerning such update. Not later than sixty days after the last 523 public hearing conducted by the Marine Sciences Division on any such 524 update, the Commissioner of Energy and Environmental Protection 525 shall post such update on the Internet web site of the Department of 526 Energy and Environmental Protection along with a notice that any 527 previous updates are superseded.
- Sec. 15. Subsection (g) of section 28-5 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

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- (g) On and after October 1, [2013] 2019, the state civil preparedness plan and program established pursuant to subsection (b) of this section shall consider [sea level change scenarios published by the National Oceanic and Atmospheric Administration in Technical Report OAR CPO-1] the most recent sea level change scenario updated pursuant to subsection (b) of section 25-680, as amended by this act.
  - Sec. 16. (NEW) (*Effective from passage*) (a) There is established a Connecticut Council on Climate Change that shall facilitate and coordinate efforts among state agencies, businesses, municipalities and nongovernmental organizations to reduce greenhouse gas emissions and make Connecticut more resilient to the effects of climate change.

- 542 (b) The Connecticut Council on Climate Change shall:
- 543 (1) Meet not less than biannually;

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- 544 (2) Monitor climate change science and the state's progress in 545 meeting the greenhouse gas reduction requirements established in 546 section 22a-200a of the general statutes, as amended by this act;
  - (3) Review existing state and municipal policies, statutes, ordinances and regulations, as applicable, and recommend emission reduction measures to meet state-wide greenhouse gas reduction requirements established in section 22a-200a of the general statutes, as amended by this act, in a manner that minimizes costs and maximizes benefits for Connecticut's economy, improves and modernizes Connecticut's energy infrastructure, maintains electric system reliability and complements the state's efforts to improve air quality;
- 555 (4) For each agency that is represented on the Connecticut Council 556 on Climate Change:
- (A) Include in any agency planning strategies, measures to support the greenhouse gas reduction requirements established in section 22a-200a of the general statutes, as amended by this act; and
  - (B) Report annually to the Connecticut Council on Climate Change on its progress in implementing measures to support the greenhouse gas reduction requirements established in section 22a-200a of the general statutes, as amended by this act; and
- (5) Report any findings and recommendations made pursuant to this section to the Governor and the joint standing committees of the General Assembly having cognizance of matters relating to the environment, energy and technology and transportation not later than October 1, 2020, and biennially thereafter.
- (c) The Department of Energy and Environmental Protection and
   the Office of Policy and Management shall coordinate the Connecticut
   Council on Climate Change, which shall consist of the following

572 members: (1) The Secretary of the Office of Policy and Management, or 573 the secretary's designee, who shall serve as cochairperson, (2) the 574 Commissioner of Energy and Environmental Protection, or the 575 commissioner's designee, who shall serve as cochairperson, (3) the 576 chairperson of the Public Utilities Regulatory Authority, or the 577 chairperson's designee, (4) the Commissioner of Economic and 578 Community Development, or the commissioner's designee, (5) the 579 Commissioner of Administrative Services, or the commissioner's 580 designee, (6) the Insurance Commissioner, or the commissioner's 581 designee, (7) the Commissioner of Housing, or the commissioner's 582 designee, (8) the Commissioner of Transportation, 583 commissioner's designee, (9) the commissioner of any other state 584 agency, as appointed by the Governor, (10) the president of the 585 Connecticut Green Bank, (11) the Executive Director of the Connecticut 586 Institute for Resilience and Climate Adaptation, (12) the Executive 587 Director of the Connecticut Conference of Municipalities, (13) the 588 Executive Director of the Connecticut Council of Small Towns, and 589 (14) any other individual who represents business and industry, a 590 nongovernmental organization, or a local government, as appointed by 591 the Governor.

(d) All appointed members of the Connecticut Council on Climate Change shall serve a two-year term from May first in the year in which such members are appointed or until a successor is appointed. All appointed members shall serve at the pleasure of the Governor.

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- Sec. 17. Subsection (m) of section 16-2 of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (m) Notwithstanding any provision of the general statutes, the decisions of the Public Utilities Regulatory Authority, including, but not limited to, decisions relating to rate amendments arising from the Comprehensive Climate and Energy Strategy, the Integrated Resources Plan, the Conservation and Load Management Plan and policies established by the Department of Energy and Environmental

Protection, shall be guided by said strategy and plans and such policies.

- Sec. 18. Subsections (b) and (c) of section 16-19e of the general statutes are repealed and the following is substituted in lieu thereof (*Effective from passage*):
- 610 (b) The Public Utilities Regulatory Authority shall promptly 611 undertake a separate, general investigation of, and shall hold at least 612 one public hearing on new pricing principles and rate structures for 613 electric distribution companies and for gas companies to consider, 614 without limitation, long run incremental cost of marginal cost pricing, 615 peak load or time of day pricing and proposals for optimizing the 616 utilization of energy and restraining its wasteful use and encouraging 617 energy conservation, and any other matter with respect to pricing 618 principles and rate structures as the authority shall deem appropriate. 619 The authority shall determine whether existing or future rate 620 structures place an undue burden upon those persons of poverty 621 status and shall make such adjustment in the rate structure as is 622 necessary or desirable to take account of their indigency. The authority 623 shall require the utilization of such new principles and structures to 624 the extent that the authority determines that their implementation is in 625 the public interest, as identified by the Department of Energy and 626 Environmental Protection in the Integrated Resources Plan and the 627 Comprehensive Climate and Energy Strategy, and necessary or 628 desirable to accomplish the purposes of this provision without being 629 unfair or discriminatory or unduly burdensome or disruptive to any 630 group or class of customers, and determines that such principles and 631 structures are capable of yielding required revenues. In reviewing the 632 rates and rate structures of electric and gas companies, the authority 633 shall be guided by the goals of the Department of Energy and 634 Environmental Protection, as described in section 22a-2d, the 635 Comprehensive Climate and Energy Strategy, the Integrated Resources 636 Plan and the Conservation and Load Management Plan. The authority 637 shall issue its initial findings on such investigation by December 1, 638 1976, and its final findings and order by June 1, 1977; provided that

after such final findings and order are issued, the authority shall at least once every two years undertake such further investigations as it deems appropriate with respect to new developments or desirable modifications in pricing principles and rate structures and, after holding at least one public hearing thereon, shall issue its findings and order thereon.

- (c) The Department of Energy and Environmental Protection shall coordinate and integrate its actions, decisions and policies pertaining to gas and electric distribution companies, so far as possible, with the actions, decisions and policies of other agencies and instrumentalities in order to further the development and optimum use of the state's energy resources and conform to the greatest practicable extent with the state energy policy as stated in section 16a-35k, the Comprehensive Climate and Energy Strategy and the Integrated Resources Plan taking into account prudent management of the natural environment and continued promotion of economic development within the state. The department shall defer, as appropriate, to any actions taken by other agencies and instrumentalities on matters within their respective jurisdictions.
- Sec. 19. Subsection (a) of section 16-19ff of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (a) Notwithstanding any provisions of the general statutes to the contrary, each electric distribution company shall allow the installation of submeters at (1) a recreational campground, (2) individual slips at marinas for metering the electric use by individual boat owners, (3) commercial, industrial, multifamily residential or multiuse buildings where the electric power or thermal energy is provided by a Class I renewable energy source, as defined in section 16-1, or a combined heat and power system, as defined in section 16-1, or (4) in any other location as approved by the authority where submetering promotes the state's energy goals, as described in the Comprehensive <u>Climate and Energy Strategy</u>, while protecting consumers against termination

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of residential utility service or other related issues. Each entity approved to submeter by the Public Utilities Regulatory Authority, pursuant to subsection (c) of this section, shall provide electricity to any allowed facility, as described in this subsection, at a rate no greater than the rate charged to that customer class for the service territory in which such allowed facility is located, provided nothing in this section shall permit such entity to charge a submetered account for (A) usage for any common areas of a commercial, industrial or multifamily residential building, or (B) other usage not solely for use by such account.

Sec. 20. Section 16-244y of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

An electric distribution company may submit to the Public Utilities Regulatory Authority for approval one or more plans to acquire new fuel cell electricity generation that began operation on or after July 1, 2017. Any such plan shall utilize a competitive process for the purpose of providing distribution system benefits, including, but not limited to, avoiding or deferring distribution capacity upgrades, and enhancing distribution system reliability, including, but not limited to, voltage or frequency improvements. Any such plan shall give preference to proposals that make efficient use of existing sites and supply infrastructure. In the event that the authority approves such plan, an electric distribution company may submit to the authority (1) one or more proposals to build, own and operate new fuel cell generation, (2) proposed power purchase agreements negotiated with persons to build, own and operate new fuel cell generation, or (3) proposals to provide financial incentives for the installation of combined heat and power systems powered by fuel cells, provided any such incentives shall be consistent with the Comprehensive Climate and Energy Strategy pursuant to section 16a-3d, as amended by this act. The facilities acquired, built pursuant to said power purchase agreements and that receive said financial incentives under this section shall not exceed a total nameplate capacity rating of thirty megawatts in the

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aggregate. Any proposal submitted by an electric distribution company to build, own and operate a fuel cell shall include the electric distribution company's full projected costs and shall demonstrate to the authority that such facility is not supported in any form of cross subsidization by affiliated entities. The authority shall evaluate any proposal submitted pursuant to this section in a manner that is consistent with the principles of sections 16-19 and 16-19e, as amended by this act, and may approve one or more proposals if it finds that such proposal (A) was developed in a manner that is consistent with the acquisition plan approved by the authority, (B) serves the longterm interests of ratepayers, and (C) cost-effectively avoids or defers distribution system costs. The costs incurred by an electric distribution company under this section shall be recovered from all customers of the electric distribution company through a fully reconciling component of electric rates for all customers of the electric distribution company, until the electric distribution company's next rate case, at which time any costs and investments for new fuel cell generation owned by the electric distribution company pursuant to subdivision (1) of this section shall be recoverable through base distribution rates. Nothing in this section shall preclude the resale or other disposition of any energy products, capacity and associated environmental attributes purchased by the electric distribution company, provided the electric distribution company shall net the cost of payments made to projects under any long-term contracts entered into pursuant to subdivision (2) of this section against the proceeds of the sale of any energy products, capacity and environmental attributes and the difference thereof plus any net costs incurred pursuant to subdivision (3) of this section shall be credited or charged to distribution customers through a reconciling component of electric rates, as determined by the authority, that is nonbypassable when switching electric suppliers. The electric distribution company may use any energy products, capacity and environmental attributes produced by such facility to meet the needs of customers served pursuant to section 16-244c. Notwithstanding the provisions of subdivision (1) of subsection (h) of section 16-244c, certificates issued by the New England Power Pool Generation

Information System for any Class I renewable energy source acquired pursuant to this section may be retained by the electric distribution company to meet the requirements of section 16-245a.

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- Sec. 21. Subsection (a) of section 16-258e of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (a) In furtherance of the Comprehensive Climate and Energy Strategy established pursuant to section 16a-3d, as amended by this act, relating to the evaluation of district heating and thermal loops in high-density areas, on or before January 1, 2018, an electric distribution company serving customers located in a distressed municipality, as defined in section 32-9p, that has a population in excess of one hundred twenty-seven thousand, shall conduct a procurement for electricity and renewable energy credits from a combined heat and power system located in such municipality that (1) has a nameplate capacity of not more than ten megawatts, (2) is in a configuration that is compatible for use with a district heating system, as defined in section 16-258, (3) is owned by a thermal energy transportation company, and (4) may include fuel cells. Such combined heat and power system shall be (A) procured by a thermal energy transportation company through a competitive bidding process, (B) in a configuration compatible for use with a district heating system, and (C) installed at a location that will maximize the efficient use of the thermal energy from the combined heat and power system by a thermal energy transportation company. The thermal energy produced by such combined heat and power system shall be subject to firm customer commitments to subscribe to thermal energy services from such thermal energy transportation company, as demonstrated by such thermal energy transportation company, for the term of the power purchase agreement entered into pursuant to this section. After reviewing any proposals submitted in response to such procurement, the electric distribution company may enter into a power purchase agreement with a thermal energy distribution company for the purchase of electricity and renewable energy credits for a period of not

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Sec. 22. Section 16a-3f of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

On or after January 1, 2013, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (I) of section 16-2, the Office of Consumer Counsel and the Attorney General, shall, in coordination with other states in the region of the regional independent system operator, as defined in section 16-1, or on the commissioner's own, solicit proposals, in one solicitation or multiple solicitations, from providers of Class I renewable energy sources, as defined in section 16-1, constructed on or after January 1, 2013. If the commissioner finds such proposals to be in the interest of ratepayers including, but not limited to, the delivered price of such sources, and consistent with the requirements to reduce greenhouse gas emissions in accordance with section 22a-200a, as amended by this act, and in accordance with the policy goals outlined in the Comprehensive Climate and Energy Strategy, adopted pursuant to section 16a-3d, as amended by this act, the commissioner may select proposals from such resources to meet up to four per cent of the load distributed by the state's electric distribution companies. The commissioner may direct the electric distribution companies to enter into power purchase agreements for energy, capacity and environmental attributes, or any combination thereof, for periods of not more than twenty years. Certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy sources procured under this section shall be sold in the New England Power Pool Generation Information System renewable energy credit market to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a. Any such agreement shall be subject to review and approval by the Public Utilities Regulatory Authority, which review shall commence upon the filing of the signed power purchase agreement with the authority. The authority shall issue a decision on such agreement not later than thirty days after such filing. In the event

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the authority does not issue a decision within thirty days after such agreement is filed with the authority, the agreement shall be deemed approved. The net costs of any such agreement, including costs incurred by the electric distribution companies under the agreement and reasonable costs incurred by the electric distribution companies in connection with the agreement, shall be recovered through a fully reconciling component of electric rates for all customers of electric distribution companies.

Sec. 23. Section 16a-3g of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

On or after July 1, 2013, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (I) of section 16-2, the Office of Consumer Counsel and the Attorney General, may, in coordination with other states in the region of the regional independent system operator, as defined in section 16-1, or on the commissioner's own, solicit proposals, in one solicitation or multiple solicitations, from providers of Class I renewable energy sources, as defined in section 16-1, or verifiable large-scale hydropower, as defined in section 16-1. If the commissioner finds such proposals to be in the interest of ratepayers, including, but not limited to, the delivered price of such sources, and consistent with the requirements to reduce greenhouse gas emissions in accordance with section 22a-200a, as amended by this act, and in accordance with the policy goals outlined in the Comprehensive Climate and Energy Strategy, adopted pursuant to section 16a-3d, as amended by this act, and section 129 of public act 11-80, including, but not limited to, base load capacity, peak load shaving and promotion of wind, solar and other renewable and low carbon energy technologies, the commissioner may select proposals from such resources to meet up to five per cent of the load distributed by the state's electric distribution companies. The commissioner may on behalf of all customers of electric distribution companies, direct the electric distribution companies to enter into power purchase agreements for energy, capacity and any environmental attributes, or

843 any combination thereof, for periods of not more than (1) fifteen years, 844 if any such agreement is with a provider of verifiable large-scale hydropower, or (2) twenty years, if any such agreement is with a 845 846 provider of a Class I renewable energy source. Certificates issued by 847 the New England Power Pool Generation Information System for any 848 Class I renewable energy sources procured under this section shall be 849 sold in the New England Power Pool Generation Information System 850 renewable energy credit market to be used by any electric supplier or 851 electric distribution company to meet the requirements of section 16-852 245a. Any such agreement shall be subject to review and approval by 853 the Public Utilities Regulatory Authority, which review shall (A) 854 include a public hearing, and (B) be completed not later than sixty 855 days after the date on which such agreement is filed with the 856 authority. The net costs of any such agreement, including costs 857 incurred by the electric distribution companies under the agreement 858 and reasonable costs incurred by the electric distribution companies in 859 connection with the agreement, shall be recovered through a fully 860 reconciling component of electric rates for all customers of electric 861 distribution companies.

Sec. 24. Section 16a-3h of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

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On or after October 1, 2013, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, may solicit proposals, in one solicitation or multiple solicitations, from providers of the following resources or any combination of the following resources: Run-of-the-river hydropower, landfill methane gas, biomass, fuel cell, offshore wind or anaerobic digestion, provided such source meets the definition of a Class I renewable energy source pursuant to section 16-1, or energy storage systems. In making any selection of such proposals, the commissioner shall consider factors, including, but not limited to (1) whether the proposal is in the interest of ratepayers,

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including, but not limited to, the delivered price of such sources, (2) the emissions profile of a relevant facility, (3) any investments made by a relevant facility to improve the emissions profile of such facility, (4) the length of time a relevant facility has received renewable energy credits, (5) any positive impacts on the state's economic development, (6) whether the proposal is consistent with requirements to reduce greenhouse gas emissions in accordance with section 22a-200a, as amended by this act, including, but not limited to, the development of combined heat and power systems, (7) whether the proposal is consistent with the policy goals outlined in the Comprehensive Climate and Energy Strategy adopted pursuant to section 16a-3d, as amended by this act, (8) whether the proposal promotes electric distribution system reliability and other electric distribution system benefits, including, but not limited to, microgrids, (9) whether the proposal promotes the policy goals outlined in the state-wide solid waste management plan developed pursuant to section 22a-241a, and (10) the positive reuse of sites with limited development opportunities, including, but not limited to, brownfields or landfills, as identified by the commissioner in any solicitation issued pursuant to this section. The commissioner may select proposals from such resources to meet up to four per cent of the load distributed by the state's electric distribution companies, provided the commissioner shall not select proposals for more than three per cent of the load distributed by the state's electric distribution companies from offshore wind resources. The commissioner may direct the electric distribution companies to enter into power purchase agreements for energy, capacity and environmental attributes, or any combination thereof, for periods of not more than twenty years on behalf of all customers of the state's electric distribution companies. Certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy sources procured under this section may be: (A) Sold in the New England Power Pool Generation Information System renewable energy credit market to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a, provided the revenues from such sale are credited to all

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customers of the contracting electric distribution company; or (B) retained by the electric distribution company to meet the requirements of section 16-245a. In considering whether to sell or retain such certificates, the company shall select the option that is in the best interest of such company's ratepayers. Any such agreement shall be subject to review and approval by the Public Utilities Regulatory Authority, which review shall be completed not later than sixty days after the date on which such agreement is filed with the authority. The net costs of any such agreement, including costs incurred by the electric distribution companies under the agreement and reasonable costs incurred by the electric distribution companies in connection with the agreement, shall be recovered through a fully reconciling component of electric rates for all customers of electric distribution companies. All reasonable costs incurred by the Department of Energy and Environmental Protection associated with the commissioner's solicitation and review of proposals pursuant to this section shall be recoverable through the nonbypassable federally mandated congestion charges, as defined in section 16-1.

930 Sec. 25. Subsection (d) of section 16a-3i of the general statutes is 931 repealed and the following is substituted in lieu thereof (*Effective from passage*):

(d) In the event there is such a presumption pursuant to subsection (a) of this section and the commissioner finds a material shortage of Class I renewable energy sources pursuant to subsection (b) of this section, and in addition to determining the adequacy pursuant to subsection (c) of this section, the commissioner shall, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, solicit proposals from providers of Class I renewable energy sources, as defined in section 16-1, operational as of the date that such solicitation is issued. If the commissioner, in consultation with the procurement manager identified in subsection (l) of section 16-2, finds such proposals to be in the interest of ratepayers including, but not limited to, the delivered price of such sources, and consistent with the

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requirements to reduce greenhouse gas emissions in accordance with section 22a-200a, as amended by this act, and in accordance with the policy goals outlined in the Comprehensive Climate and Energy Strategy, adopted pursuant to section 16a-3d, as amended by this act, the commissioner, in consultation with the procurement manager identified in subsection (l) of section 16-2, may select proposals from such sources to meet up to the amount necessary to ensure an adequate incremental supply of Class I renewable energy sources to rectify any projected shortage of Class I renewable energy supply identified pursuant to subsection (c) of this section. The commissioner shall direct the electric distribution companies to enter into power purchase agreements for energy, capacity and environmental attributes, or any combination thereof, from such selected proposals for periods of not more than ten years. Certificates issued by the New England Power Pool Generation Information System for any Class I renewable energy sources procured under this section shall be sold in the New England Power Pool Generation Information System renewable energy credit market to be used by any electric supplier or electric distribution company to meet the requirements of section 16-245a. Any such agreement shall be subject to review and approval by the Public Utilities Regulatory Authority, which review shall commence upon the filing of the signed power purchase agreement with the authority. The authority shall issue a decision on such agreement not later than thirty days after such filing. In the event the authority does not issue a decision within thirty days after such agreement is filed with the authority, the agreement shall be deemed approved. The net costs of any such agreement, including costs incurred by the electric distribution companies under the agreement and reasonable costs incurred by the electric distribution companies in connection with the agreement, shall be recovered through a fully reconciling component of electric rates for all customers of electric distribution companies.

Sec. 26. Subsection (a) of section 16a-3j of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):

(a) In order to secure cost-effective resources to provide more reliable electric service for the benefit of the state's electric ratepayers and to meet the state's energy and environmental goals and policies established in the Integrated Resources Plan, pursuant to section 16a-3a, as amended by this act, and the Comprehensive Climate and Energy Strategy, pursuant to section 16a-3d, as amended by this act, the Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, may, in coordination with other states in the control area of the regional independent system operator, as defined in section 16-1, or on behalf of Connecticut alone, issue multiple solicitations for long-term contracts from providers of resources described in subsections (b), (c) and (d) of this section.

- Sec. 27. Subsection (e) of section 16a-3j of the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
- (e) The Commissioner of Energy and Environmental Protection, in consultation with the procurement manager identified in subsection (l) of section 16-2, the Office of Consumer Counsel and the Attorney General, shall evaluate project proposals received under any solicitation issued pursuant to subsection (b), (c) or (d) of this section, based on factors including, but not limited to, (1) improvements to the reliability of the electric system, including during winter peak demand; (2) whether the benefits of the proposal outweigh the costs to ratepayers; (3) fuel diversity; (4) the extent to which the proposal contributes to meeting the requirements to reduce greenhouse gas emissions and improve air quality in accordance with sections 16-245a, 22a-174 [,] and 22a-200a, as amended by this act; (5) whether the proposal is in the best interest of ratepayers; and (6) whether the proposal is aligned with the policy goals outlined in the Integrated Resources Plan, pursuant to section 16a-3a, as amended by this act, and the Comprehensive Climate and Energy Strategy, pursuant to section 16a-3d, as amended by this act, including, but not limited to,

environmental impacts. In conducting such evaluation, the commissioner may also consider the extent to which project proposals provide economic benefits for the state. In evaluating project proposals received under any solicitation issued pursuant to subsection (b), (c) or (d) of this section, the commissioner shall compare the costs and benefits of such proposals relative to the expected or actual costs and benefits of other resources eligible to respond to the other procurements authorized pursuant to this section.

- Sec. 28. Subsection (a) of section 16a-3m of the 2018 supplement to the general statutes is repealed and the following is substituted in lieu thereof (*Effective from passage*):
  - (a) For the purposes of this section:

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- (1) "Best interest of ratepayers" means the benefits of a contract or proposal outweigh the costs to electric ratepayers, based on whether the delivered prices of sources included in such contract or proposal are less than the forecasted price of energy and capacity, as determined by the commissioner or the commissioner's designee, and based on a consideration of the following factors, as determined by the commissioner or the commissioner's designee: (A) Impacts on electric system operations and reliability; (B) the extent to which such contract or proposal will contribute to (i) the local sourcing requirement set by the regional independent system operator, as defined in section 16-1, and (ii) meeting the requirements to reduce greenhouse gas emissions and improve air quality in accordance with sections 16-245a, 22a-174 and 22a-200a, as amended by this act; (C) fuel diversity; and (D) whether the proposal is aligned with the policy goals outlined in the Integrated Resources Plan developed pursuant to section 16a-3a, as amended by this act, and the Comprehensive Climate and Energy Strategy developed pursuant to section 16a-3d, as amended by this act, including, but not limited to, environmental impacts; and
- (2) "Eligible nuclear power generating facility" means a nuclear power generating facility that is located in the control area of the regional independent system operator, as defined in section 16-1, and

is licensed to operate through January 1, 2030, or later.

- Sec. 29. Subsections (b) and (c) of section 22a-200a of the general statutes are repealed and the following is substituted in lieu thereof (*Effective from passage*):
- (b) On or before January 1, 2010, and biannually thereafter, the state agencies that are members of the [Governor's Steering Committee] Connecticut Council on Climate Change shall submit a report to the Secretary of the Office of Policy and Management and the Commissioner of Energy and Environmental Protection. The report shall identify existing and proposed activities and improvements to the facilities of such agencies that are designed to meet state agency energy savings goals established by the Governor. The report shall also identify policies and regulations that could be adopted in the near future by such agencies to reduce greenhouse gas emissions in accordance with subsection (a) of this section.
  - (c) Not later than January 1, 2012, and every three years thereafter, the Commissioner of Energy and Environmental Protection shall, in consultation with the Secretary of the Office of Policy and Management and the [Governor's Steering Committee] Connecticut Council on Climate Change, report, in accordance with the provisions of section 11-4a, to the joint standing committees of the General Assembly having cognizance of matters relating to the environment, energy and transportation on the quantifiable emissions reductions achieved pursuant to subsection (a) of this section. The report shall include a schedule of proposed regulations, policies and strategies designed to achieve the limits of greenhouse gas emissions imposed by said subsection, an assessment of the latest scientific information and relevant data regarding global climate change and the status of greenhouse gas emission reduction efforts in other states and countries.
- Sec. 30. Section 22a-200e of the general statutes is repealed. (*Effective from passage*)

This act shall take effect as follows and shall amend the following		
sections:		
Section 1	from passage	8-23(d)
Sec. 2	from passage	16a-3a(a)
Sec. 3	from passage	16a-3d
Sec. 4	from passage	16a-3e
Sec. 5	from passage	16a-27(h)
Sec. 6	from passage	22a-92(a)
Sec. 7	from passage	22a-93(7)
Sec. 8	from passage	22a-93(19)
Sec. 9	from passage	22a-94
Sec. 10	from passage	22a-200a(a)
Sec. 11	from passage	22a-478(a)
Sec. 12	from passage	25-68b
Sec. 13	from passage	25-68d(h)
Sec. 14	from passage	25-680
Sec. 15	from passage	28-5(g)
Sec. 16	from passage	New section
Sec. 17	from passage	16-2(m)
Sec. 18	from passage	16-19e(b) and (c)
Sec. 19	from passage	16-19ff(a)
Sec. 20	from passage	16-244y
Sec. 21	from passage	16-258e(a)
Sec. 22	from passage	16a-3f
Sec. 23	from passage	16a-3g
Sec. 24	from passage	16a-3h
Sec. 25	from passage	16a-3i(d)
Sec. 26	from passage	16a-3j(a)
Sec. 27	from passage	16a-3j(e)
Sec. 28	from passage	16a-3m(a)
Sec. 29	from passage	22a-200a(b) and (c)
Sec. 30	from passage	Repealer section

**ENV** Joint Favorable

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

#### **OFA Fiscal Note**

State Impact: See Below

Municipal Impact: See Below

#### Explanation

The bill integrates greenhouse gas reductions into various state planning documents and incorporates the new reduction into existing energy solicitation requirements, which could result in increased energy costs to the state and municipalities as ratepayers.

Additionally, the bill expands the definition of "flood-proofing" to include a requirement for an additional two feet of freeboard above a certain base flood mark.<sup>1</sup> To the extent the state or municipalities build in certain flood-prone areas, there could be increased building costs associated with these new requirements. However, any increased building costs for additional freeboard material may be offset by lower insurance premiums.

The bill also makes many minor, technical, and conforming changes, which have no fiscal impact.

#### The Out Years

The annualized ongoing fiscal impact described above associated with increased building costs for the state and municipalities, if any, would continue into the future subject to inflation and the cost of freeboard.

<sup>&</sup>lt;sup>1</sup> Freeboard is a safety factor, expressed in feet above a flood level, to compensate for unknown factors that contribute to flood heights greater than calculated.

# OLR Bill Analysis

**SB 7** 

# AN ACT CONCERNING CLIMATE CHANGE PLANNING AND RESILIENCY.

#### SUMMARY

This bill establishes a new greenhouse gas (GHG) emissions reduction requirement and integrates GHG reductions into various state planning documents and efforts, such as the state's Integrated Resources Plan and its plan of conservation and development. It also incorporates the new reduction into the law's existing energy source solicitation requirements.

The bill integrates sea level change projections, determined by UConn's Marine Sciences Division as an update of existing federal projections, into various municipal and state planning documents, such as state and municipal plans of conservation and development and municipal evacuation or hazard mitigation plans. It also applies these projections to the state's coastal management and flood management laws.

The bill renames the state's Comprehensive Energy Strategy as the Comprehensive Climate and Energy Strategy, and requires it to be updated to account for the state's GHG reduction requirements.

The bill establishes the Connecticut Council on Climate Change as a statutory council, which must facilitate and coordinate efforts with various parties to reduce GHG emissions and increase the state's resiliency to climate change.

The bill also makes many minor, technical, and conforming changes, including those to account for the council's renaming and incorporate the revised content, eliminate obsolete provisions such as a law on the

Governor's Steering Committee subcommittee on climate change, replace a reference in the flood management statutes to "one-hundred-year flood" with "base flood," and eliminate an incorrect statutory reference.

EFFECTIVE DATE: Upon passage

#### **GHG EMISSION REDUCTION**

#### New Requirement

The bill establishes a new GHG reduction requirement for the state.

Existing law, unchanged by the bill, requires the state to reduce its GHG emissions to a level that is at least (1) 10% below 1990's emission level by January 1, 2020 and (2) 80% below 2001's emissions level by January 1, 2050.

The bill requires the state to also reduce its GHG emissions to a level that is at least 45% below 2001's emissions level by January 1, 2030. As under existing law, the Department of Energy and Environmental Protection (DEEP) commissioner determines this level.

The bill requires the Connecticut Council on Climate Change, which the bill establishes (see below), instead of the Governor's Steering Committee on Climate Change, to report every three years to the Energy and Technology, Environment, and Transportation committees on the achieved quantifiable emissions reductions. By law, this report must include (1) a schedule of proposed regulations, policies, and strategies to obtain the GHG emissions limits; (2) an assessment of the latest scientific information and data on global climate change; and (3) GHG emission reduction efforts in other states and countries.

#### Integrating Reduction Requirement

**Integrated Resources Plan.** By law, DEEP, in consultation with electric companies, must review the state's energy and capacity resource assessment and approve a comprehensive plan for procuring energy resources (i.e., Integrated Resources Plan (IRP)).

Among other things, the plan must be consistent with the state's environmental goals and standards. The bill specifies that this includes the state's GHG reduction goals. Current law requires the IRP to seek to lower the cost of electricity. Under the bill, it must do so while meeting environmental goals and standards in the most cost-efficient manner.

Existing law also requires the IRP to indicate specific options to reduce electric rates and costs. The bill provides that these options must also achieve the state's GHG emission reduction requirements.

**State Plan of Conservation and Development.** The bill requires revisions to the state plan of conservation and development, made after October 1, 2019, to consider the GHG emission reduction requirements.

#### SEA LEVEL CHANGE SCENARIOS

#### **Update to Scenarios**

By law, UConn's Marine Sciences Division must update the sea level change scenarios published by the National Oceanic and Atmospheric Administration (NOAA) in Technical Report OAR CPO-1 (see BACKGROUND). This must be done at least every 10 years, involve at least one public hearing, and be within available resources.

The bill requires the DEEP commissioner, within 60 days after the last public hearing the Marine Sciences Division conducts on the update, to post on its website (1) the update and (2) a notice that it supersedes previous updates.

## Applying New Scenarios

**Planning documents.** Existing law requires consideration of sea level change when preparing various planning documents.

Under the bill, beginning October 1, 2019, the bill requires the most recent sea level change update, rather than NOAA's OAR CPO-1, to be incorporated in:

- 1. municipal evacuation or hazard mitigation plans,
- the state's civil preparedness plan and program,
- 3. municipal plans of conservation and development, and
- 4. revisions to the state's plan of conservation and development.

Under the bill, the sea level change update in the state's plan of conservation and development must address coastal flooding, in additional to coastal erosion as under current law.

**Coastal Management Act.** The bill incorporates the sea level change scenario updates into the state's Coastal Management Act (CMA), which provides guidance for and helps regulate activity along the state's coastline (CGS § 22a-90 et seq.). The CMA designates the state's coastal area and within the area, the "coastal boundary" and subjects property within the coastal boundary to its regulatory, development, and planning requirements.

The bill expands what may be considered the "coastal boundary" by adding the elevation of the most recent sea level change scenario to two means of determining the boundary under current law. Under the bill, the coastal boundary is a continuous line on the landward side delineated by, the farthest inland of, (1) the interior contour elevation of the one hundred year frequency coastal flood zone plus the most recent sea level change scenario's elevation; (2) a 1,000 foot setback measured from the mean high water mark in coastal waters, determined from the most recent sea level change scenario's elevation; or (3) a 1,000 foot setback measured from the inland tidal wetland boundary.

The bill requires municipal planning commissions in coastal municipalities to adopt or amend their municipal coastal boundaries, in accordance with existing statutory notice, hearing, and procedural requirements within one year after the most recent sea level change scenario update. The adoption or amendment must reflect the landward extent of the coastal boundary's interior contour elevation.

The new municipal boundaries must be submitted to the DEEP commissioner in either electronic or paper form, as he specifies, for his review and approval. They take effect upon receipt of the commissioner's written approval.

The bill replaces the CMA's definition of "sea level rise" with the most recent sea level change scenario update. Current law specifies that sea level rise is the arithmetic mean of the most recent equivalent per decade surface level rise of the state's tidal and coastal waters, as documented by NOAA for its Bridgeport and New London tide gauges. The bill applies this new definition to the factors the DEEP commissioner must consider when maintaining a priority list of eligible water quality projects for Clean Water Fund grants.

The bill expands, for purposes of the CMA, the definition of "coastal hazard areas" to also include all areas subject to inundation as determined by the most recent sea level change scenario. Current law limits it to land areas inundated during coastal storm events or subject to erosion from those events, including flood hazard areas set by the National Flood Insurance Act, and all erosion hazard areas set by the DEEP commissioner. Under the CMA, it is state policy to manage coastal hazard areas so that development occurs in a way that minimizes hazards to life and property (CGS § 22a-92).

**Flood-proofing.** By law, "flood-proofing" is any combination of structural or nonstructural additions, changes, or adjustments that reduce or eliminate flood damage to real property, water and sanitary facilities, and to structures and their contents. For property located in the coastal boundary to be considered "flood-proofed," the bill requires it to include at least two additional feet of freeboard above base flood level and any additional freeboard to account for the most recent sea level change scenario update. Freeboard is a safety factor, expressed in feet above a calculated flood level, to compensate for unknown factors that contribute to flood heights greater than calculated (e.g., ice jams, debris, wave action).

The state's flood management laws give the DEEP commissioner the

authority to determine how many and where state-owned structures and state uses may be in the floodplain and to identify how to make them less susceptible to flooding, including by flood-proofing. The laws also require any state agency proposing an activity within or that affects a floodplain to submit information to the commissioner about the use of flood-proofing techniques (CGS §§ 25-68c and 25-68d).

# COMPREHENSIVE CLIMATE AND ENERGY STRATEGY Purpose

Under current law, the DEEP commissioner prepares and updates the state's Comprehensive Energy Strategy (CES) to assess and plan for the state's energy needs, including electricity, heating, cooling, and transportation.

The bill renames the CES to be the Comprehensive Climate and Energy Strategy (CCES) and requires that the new strategy be (1) prepared by October 1, 2020 and (2) updated then every four years. By law, the CES is currently updated triennially.

In addition to the incorporated content required for the CES under current law (e.g., an assessment and plan for the state's energy needs, findings from other energy-related documents), the bill requires the CCES to (1) provide necessary analysis and recommendations to guide the state's energy policy to meet the GHG emission reduction requirements in the most cost-effective manner and (2) incorporate the reports required by law relating to the GHG emissions reduction requirements (see § 29, above and below). The bill requires the CCES to also include a (1) statement of energy policies and long-term energy planning objectives and strategies that are appropriate to achieve (a) the GHG emission reductions and (b) a least-cost combination of energy supply resources to meet the reductions, and (2) strategy for meeting the state's energy efficiency goals.

## Development

Under the bill, the process for developing the CCES is the same as under existing law for the CES. The DEEP commissioner must conduct

a proceeding that includes at least one public meeting and one technical meeting. Certain specified information, including notice of upcoming meetings, must be posted on DEEP's website and may be published in newsprint. The public may provide or submit comments to the DEEP commissioner, who must consider all comments about the strategy. PURA must comment on the strategy's impact on natural gas and electric rates. The CCES may be modified under the same procedure.

As under existing law, the final CCES must be submitted to the Energy and Technology and Environment committees.

# CONNECTICUT COUNCIL ON CLIMATE CHANGE Purpose

The bill establishes the Connecticut Council on Climate Change and tasks it with facilitating and coordinating efforts among state agencies, businesses, municipalities, and nongovernmental organizations (NGOs) to (1) reduce GHG emissions and (2) make the state more resilient to climate change effects.

The bill requires the council to meet at least twice a year. The council must:

- 1. monitor climate change science and the state's progress in meeting the law's GHG reduction requirements and
- 2. review applicable state and municipal policies, statutes, ordinances, and regulations and recommend emission reductions measures to meet the GHG reduction requirements in a way that (a) minimizes costs and maximizes benefits for the economy, (b) improves and modernizes energy infrastructure, (c) maintains electric system reliability, and (d) complements efforts to improve air quality.

#### Members

The bill requires DEEP and OPM to coordinate the council. The DEEP commissioner and OPM secretary, or their designees, serve as

co-chairpersons. Other members of the council include the following:

- Public Utilities Regulatory Authority chairperson, economic and community development commissioner, administrative services commissioner, insurance commissioner, housing commissioner, and transportation commissioner, or their designees;
- 2. commissioner of any other state agency the governor appoints;
- 3. Connecticut Green Bank president;
- 4. Connecticut Institute for Resilience and Climate Adaptation executive director;
- 5. executive directors of Connecticut Conference of Municipalities and Connecticut Council of Small Towns; and
- 6. other individuals the governor appoints to represent business and industry, an NGO, or a local government.

Under the bill, appointed members serve two-year terms from May 1 in the appointment year or until a successor is appointed. Appointed members serve at the governor's pleasure.

# Member Reporting Requirements

The bill requires each agency represented on the council to:

- 1. include steps to support GHG reduction requirements in agency planning strategies;
- 2. annually report to the council on progress implementing these steps;
- 3. report any related findings and recommendations, every two years beginning by October 1, 2020, to the governor and the Energy and Technology, Environment, and Transportation committees; and

4. begin biennially reporting on January 1 to the OPM secretary and DEEP commissioner to identify (a) existing and proposed activities and improvements to agency facilities to meet the governor's energy savings goals and (b) policies and regulations that could be adopted to reduce GHG emissions.

#### **BACKGROUND**

### NOAA Technical Report OAR CPO-1

The December 6, 2012 NOAA Technical Report OAR CPO-1 titled, "Global Sea Level Rise Scenarios for the United States National Climate Assessment," provides sea level rise scenarios to help experts and stakeholders analyze vulnerability, impacts, and adaptation strategies. It identifies four global mean sea level rise scenarios ranging from eight inches to 6.6 feet by 2100. The report specifies that the scenarios should be used with local and regional information on climatic, physical, ecological, and biological processes and the coastal communities' culture and economy.

#### **COMMITTEE ACTION**

**Environment Committee** 

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Joint Favorable
Yea 19 Nay 11 (03/22/2018)
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